REMARKS

Claims 1, 3, 4, 6, 8, 9, 11, 12, 14, 16, 17, 19, 20, 22, and 24 are currently pending in the application.

This amendment is in response to the final Office Action of June 25, 2007.

35 U.S.C. § 112 Claim Rejections

Claims 1, 3, 4, 6, 8, 9, 11, 12, 14, 16, 17, 19, 20, 22, and 24 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants respectfully traverse this rejection, as hereinafter set forth.

Applicants have amended the claimed invention as set forth in specification numbered paragraph [0047] for the presently claimed invention to contain subject matter which is described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed for the invention to comply with the provisions of 35 U.S.C. § 112. Therefore, presently amended claims 1, 3, 4, 6, 8, 9, 11, 12, 14, 16, 17, 19, 20, 22, and 24 are allowable under the provisions of 35 U.S.C. § 112.

Applicants submit that claims 1, 3, 4, 6, 8, 9, 11, 12, 14, 16, 17, 19, 20, 22, and 24 are clearly allowable over the cited prior art.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on U.S. Patent 5,972,234 to Weng et al., in view of U.S. Patent 5,300,172 to Ishiwata et al.

Claims 1, 3, 4, 6, 8, 9, 11, 12, 14, 16, 17, 19, 20, 22 and 24 may stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Weng et al. (U.S. Patent 5,972,234), in view of Ishiwata et al. (U.S. Patent 5,300,172). Applicants respectfully traverse this rejection, as hereinafter set forth, if such a rejection is again made.

Applicants assert that to establish a *prima facie* case of obviousness under 35 U.S.C. § 103 three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the cited prior art reference must teach or suggest all of the claim limitations. Furthermore, the suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure.

After carefully considering the cited prior art, the rejections, and the Examiner's comments, Applicants have amended the claimed invention to clearly distinguish over the cited prior art.

Turning to the cited prior art, Weng et al. teaches or suggests a method for marking a semiconductor surface. Weng et al. describe a polymeric tape can be provided that is suitable for ablative photodecomposition. Column 4 lines 25-40. In other words, the mark which is to be formed in the semiconductor surface is first formed as a cavity through the tape using "high-intensity energy beams such as ultraviolet light or laser." Column 4 lines 32-33; *See also* column 2 lines 63-63, column 3 lines 6-11, column 3 lines 22-23, column 3 lines 27-30, column 3 lines 39-40, column 4 lines 52-54. After the mark has been formed *through* the tape, the tape is applied to the semiconductor surface. Column 4 line 57 – column 5 line 7. Finally, the mark is formed in the semiconductor surface by etching the semiconductor in the area exposed by the mark formed in the tape. The tape protects the rest of the semiconductor surface from the etchant, such that the mark in the tape is patterned into the semiconductor surface. Column 5 lines 8-25. Finally, the tape is removed from the surface of the semiconductor, leaving the mark formed by the etchant. Column 5 lines 27 – 37. The tape has a thickness of about 0.5 mm and can be provided with an adhesive backing or without an adhesive backing. Column 5, lines 38-41. A suitable adhesive may be an acrylic type polymer. Column 4, lines 63,64.

The Ishiwata et al. reference teaches or suggests the use of a radiation curable adhesive tape on a wafer to form at three dimensional network.

Applicants assert that any combination of the Weng et al. reference in view of the Ishiwata et al. reference fails to establish a *prima facie* case of obviousness under 35 U.S.C. § 103 regarding the claimed inventions of presently amended independent claims 1, 9, and 17 because cited prior art fails to teach or suggest all the claim limitations and the suggestion to make the claimed combination and the reasonable expectation of success must is found solely in Applicants' disclosure, not the cited prior art.

Applicants assert that the cited prior art fails to teach or suggest the claim limitations of presently amended independent claims 1, 9, and 17 calling for "a marking tape comprising a material having a coefficient of thermal expansion substantially similar to the semiconductor device and antistatic properties; and a multilayer adhesive including: a first outermost adhesive layer comprising a mixture of electromagnetic radiation-curable components, the electromagnetic radiation-curable components providing a laser-markable surface upon exposure to an electromagnetic radiation source by curing and bonding to at least a portion of a semiconductor device and forming a mark on the semiconductor device when a laser marks a semiconductor device; and a second adhesive layer different than the first outermost adhesive layer disposed between the tape and the first outermost adhesive layer, the second adhesive layer comprising a mixture of electromagnetic radiation-curable components upon exposing to radiation the second adhesive layer performs at least one property of the adhesive facilitating peeling of the flexible film material when laser marking a semiconductor device", "a marking tape having a coefficient of thermal expansion substantially similar to the semiconductor device; and a multilayer adhesive including: a first outermost adhesive layer comprising a mixture of electromagnetic radiation-curable components providing a mark on a laser-markable surface upon exposure thereof to electromagnetic radiation by curing and bonding to at least a portion of a semiconductor device when a laser marks a semiconductor device; and a second adhesive layer different than the first outermost adhesive layer disposed between the flexible film material and the first outermost adhesive layer, the second adhesive layer comprising a mixture of electromagnetic radiation-curable components upon exposing to radiation the second adhesive layer performs at least one property of the adhesive facilitating peeling of the flexible film material when laser marking a semiconductor device", and "a marking tape having a material having a coefficient of thermal expansion substantially similar to the semiconductor device and

antistatic properties; and at least two layers of adhesive including: a first outermost adhesive layer comprising a mixture of electromagnetic radiation-curable components providing a mark on a surface upon exposure thereof to electromagnetic radiation by curing and bonding to at least a portion of a semiconductor device when a laser marks a semiconductor device; and a second adhesive layer different than the first outermost adhesive layer disposed between the film material and the first outermost adhesive layer, the second adhesive layer comprising a mixture of electromagnetic radiation-curable components upon exposing to radiation the second adhesive layer performs at least one property of the adhesive facilitating peeling of the flexible film material when laser marking a semiconductor device".

Applicants assert that no combination of the Weng et al. reference and the Ishiwata et al. reference teaches or suggests the use of a tape which has a portion thereof left on a semiconductor device for a mark after electromagnetic radiation has been applied thereto. Applicants assert that, in contrast to the presently claimed inventions of presently amended independent claims 1, 9, and 17, the Weng et al. reference, at best, teaches or suggests a tape having one single adhesive layer, not a tape having multilayer adhesive used to make a cavity in which an etchant is used to mark the semiconductor device, not electromagnetic radiation as required by the claimed inventions, while the Ishiwata et al. reference teaches or suggests the use of a radiation curable adhesive tape on a wafer to form at three dimensional network while any combination of the Weng et al. reference and the Ishiwata et al. reference teaches or suggests a tape having one adhesive layer used to form a three dimensional network. Further, Applicants assert that since Weng et al. does not teach or suggest using a tape that has laser markable surface and since Ishwata et al. teach or suggest the use of a radiation cured adhesive used to form a three dimensional network, any rejection based upon the Weng et al. reference and the Ishawa et al. reference is a hindsight reconstruction of the Applicants inventions based solely upon Applicants' disclosure because neither Weng et al. contains any such teaching or suggestion and Ishawa et al. merely forms three dimensional networks using adhesive. In each instance of the various embodiments of the Weng et al. reference, the semiconductor device is marked using an etchant, not a laser. In Ishawa et al. the adhesive is used to form only three dimensional networks. The claimed inventions of presently amended independent claims 1, 9, and 17 contain the claim limitations for a tape having at least two layers of different adhesive thereon. The first layer of

adhesive contains the claim limitation calling for "a first outermost adhesive layer comprising a mixture of electromagnetic radiation-curable components, the electromagnetic radiation-curable components providing a laser-markable surface upon exposure to an electromagnetic radiation source by curing and bonding to at least a portion of a semiconductor device forming a mark on the semiconductor device when a laser marks a semiconductor device" or "a first outermost adhesive layer comprising a mixture of electromagnetic radiation-curable components providing a mark on a laser-markable surface upon exposure thereof to electromagnetic radiation by curing and bonding to at least a portion of a semiconductor device when a laser marks a semiconductor device". The second layer of adhesive contains the claim limitation calling for a different adhesive than the first outermost layer of adhesive comprision "a mixture of electromagnetic radiation-curable components to radiation the second adhesive layer performs at least one curing onto portions of the first outermost adhesive layer and losing adhesive properties for facilitating peeling of the flexible film material". The second layer of adhesive has different properties from the first layer of adhesive. The different properties of the first layer of adhesive and the second layer of adhesive are clearly distinct from each other as both described in the independent claims 1, 9, and 17 and in Applicants' disclosure. Such properties are set forth in the claimed inventions of presently amended independent claims 1, 9, and 17.

In contrast to the claimed inventions, the Weng et al. reference merely teaches or suggests a single layer of adhesive. Applicants assert that all words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 165 USPQ 496 (CCPA 1970) MPEP § 2143.03. Applicants assert that neither the Weng et al. reference nor the Ishiwata et al. reference nor any combination thereof teaches or suggests the use of a second adhesive layer different than the first outermost adhesive layer. Accordingly, Applicants assert that the rejection does not and cannot establish a *prima facie* case of obviousness under 35 U.S.C. § 103 because all the claim limitations are not taught or suggested by the prior art. *In re Robka, 490* F.2d 981, 180 USPQ 580 (CCPA 1974) MPEP § 2143.03. Therefore, presently amended independent claims 1, 9, and 17 are allowable as well as the dependent claims therefrom.

Applicants request entry of this amendment for the following reasons:

The amendment is timely filed.

The amendment places the application in condition for allowance.

The amendment does not require any further search or consideration as the amendments to the claims deal with 35 U.S.C. § 112 issues.

Applicants request the allowance of claims 1, 3, 4, 6, 8, 9, 11, 12, 14, 16, 17, 19, 20, 22, and 24 and the case passed for issue.

Respectfully submitted,

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